

### **REMARKS**

In the Office Action, the Examiner rejected claims 1-25 and, further, objected to claims 5-8 based on certain informalities. By the present Response, Applicants have amended claims 5, 6, 9, 13, and 23 to correct clerical errors. Upon entry of the amendments, claims 1-25 will remain pending in the present application. In view of the foregoing amendments and the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

#### **Claim Objections**

In the Office Action, the Examiner objected to claims 5-8 for presenting informalities: “referring to claims 5 and 6, both of the claims should probably depend from claim 2, since the limitation ‘the pivotable member’ was first recited in claim 2.” Office Action mailed September 17, 2004, p. 2. By the present Response, as discussed above, Applicants have amended claims 5 and 6 to change the dependency of these claims. These amendments obviate the Examiner’s objection. Accordingly, Applicants respectfully request withdrawal of the Examiner’s objection to claims 5-8.

#### **Claim Rejections Under 35 U.S.C. § 112**

In the Office Action, the Examiner rejected claim 13 under 35 U.S.C. § 112, second paragraph, as indefinite. Specifically, the Examiner noted that claims 13 lacked antecedent basis for the recitation “the positionable member” therein. As mentioned above, Applicants have amended claim 13 to recite “the leveraging member” rather than the “positionable member.” And this amendment obviates the Examiner’s rejection. Accordingly, Applicants respectfully request withdrawal of the Examiner’s Sections 112 rejection of claim 13.

**Claim Rejections Under 35 U.S.C. § 102**

In the Office Action, the Examiner rejected claims 9-12 and 23-25 under 35 U.S.C. § 102(b) as anticipated by the Fasig et al. reference (U.S. Patent No. 5,454,080; hereinafter "Fasig"). With regard to independent claims 9 and 23 the Examiner stated:

Referring to claim 9, Fasig teaches a locking mechanism for coupling and uncoupling a removable component (60) coupleable to and from a computer device (12), comprising a leveraging member (54) configured to at least partially disengage a removable component (60) with respect to a computer device, an engaging member (68) selectively positionable in first (i.e., clamped) and second (i.e., unclamped) positions such that the engaging member (68) in the first position at least partially engages with the leveraging member (54) in the first position, and a pivotable (70) member coupled to the engaging member such that pivotal movement of the pivotable member actuates the engaging member along a longitudinal axis (i.e., clamps along a lengthwise axis) of the engaging member. See Figs. 3 and 5a and the corresponding specification.

....

Referring to claim 23, Fasig teaches a method of selectively securing a removable component (60) to a computer device (12), comprising actuating a locking mechanism such that the locking mechanism actuates an engaging member (68) through a pivotable member (70) configured to selective position the removable component between secured of unsecured [*sic*] configurations with respect to the computer device. See col. 6, lines 46-67.

Office Action mailed September 17, 2004, pp. 2-4. Respectfully, Applicants traverse the Examiner's rejections, because the cited reference does not disclose all of the features recited in independent claims 9 and 23.

**Legal Precedent**

First, Applicants respectfully remind the Examiner that, during patent examination, the pending claims must be given an interpretation that is reasonable and consistent with

the specification. *See In re Prater*, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969); *see also In re Morris*, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); M.P.E.P. §§ 608.01(o) and 2111. In other words, “[c]laims are not to be read in a vacuum, and limitations there are to be interpreted in light of the specification in giving them ‘their broadest reasonable interpretation.’” *In re Marosi*, 218 U.S.P.Q. 289, 292 (Fed. Cir. 1983) (emphasis on original). Moreover, interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *See In re Cortright*, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); *see also* M.P.E.P. § 2111

Secondly, Applicants respectfully emphasize that anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985). To maintain a proper rejection under Section 102, a single reference must teach each and every limitation of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). The prior art reference also must show the *identical* invention “*in as complete detail as contained in the ... claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Accordingly, Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter.

#### **Summary of an Embodiment of the Present Technique**

However, prior to addressing the specifics of the rejection, Applicants believe a review of certain embodiments of the present technique, which are described in the present application, will be helpful in expediting examination of the present claims.

In accordance with one exemplary embodiment, the present technique provides a locking assembly for a removable component engageable with a computer device. *See* Application, ¶ [0013]. The locking assembly 24 interacts with a pivotable lever 22 to

mitigate the risk of inadvertent engagement or disengagement of the removable component 12 with respect to the computer device 10. *See id.* at ¶¶ [0016]-[0017]; FIG. 1. For example, movement of the pivotable lever 22 facilitates the generation of leverage between the computer device 10 and the removable component 12. *See id.* In other words, movement of the pivotable lever 22 provides for a facilitating removal or insertion force (i.e., leverage) for engagement or disengagement of the removable component 12 with respect to the computer device. However, to block inadvertent actuation of the lever 22, the exemplary locking mechanism 24 includes a bolt mechanism 52 that impinges on the path of travel of the pivotable lever 22, thereby inhibiting the generation of sufficient leverage to engage and/or disengage the component 12 with respect to the computer device 12. For example, the bolt mechanism 52, which is actuated by a pivotable knob 44, engages with the pivotable lever 22 by, in one embodiment, extending through the pivotable lever 22, thereby blocking movement of the lever 22. *See id.* at ¶¶ [0022]-[0023] FIGS. 2-3. With the foregoing in mind, Applicants respectfully assert that Fasig does not anticipate independent claims 9 and 23 and the claims depending therefrom.

#### **Independent Claim 9 and the Claims Depending Therefrom**

Independent claim 9 recites,

A locking mechanism for coupling and uncoupling a removable component coupleable to and from a computer device, comprising:

a leveraging member configured to at least partially disengage a removable component with respect to a computer device;

an engaging member selectively positionable in first and second positions such that the engaging member at least partially engages with the leveraging member in the first position; and

a pivotable member coupled to the engaging member such that pivotal movement of the pivotable member actuates

the engaging member along a longitudinal axis of the engaging member.

(Emphasis added.) Respectfully, Applicants assert that Fasig does not disclose all of these features, particularly those highlighted above.

**The Fasig reference does not disclose a leveraging member.**

For example, Applicants respectfully assert that Fasig does not disclose a *leveraging member* as recited in the instant claims. Rather, enumerated element 54 of Fasig, which the Examiner contends is anticipatory of the claimed leveraging member, is nothing more than a male portion of a “*zero force connector*” and provides *no leverage* whatsoever. *See* Office Action mailed September 17, 2004, p. 3 (stating “comprising a leveraging member (54) configured to at least partially disengage a removable component (60)”); *see also* Fasig, col. 5, ll. 25-27. In the Fasig device, the system 12 includes a docking bay 40 that receives a cartridge 60. *See* Fasig, col. 4, ll. 34-39; FIGS. 1 and 3. The docking bay 40 of the Fasig device includes a printed circuit card 50 that facilitates the *electrical* coupling of the cartridge 60 to the system 12. *See id.* at col. 5, ll. 17-35. This printed circuit card 50 of the Fasig device carries a “male portion 54 of the *zero-force* connector.” *Id.* at col. 5, ll. 33-35 (emphasis added). And the male portion 54 *is fixed* (i.e., *immobile*) within the docking bay 40. *See id.* at FIGS. 4 and 5a.

When the cartridge 60 of the Fasig device is inserted into the docking bay 40, the fixed male portions passively receives the female portion 68 without any resistance or force, hence the name “zero-force connector.” After, the pins of the male connector portion 54 of the Fasig device are aligned with the female connector portion 64, a user turns handle 70 to engage the two portions. *See* Fasig, col. 6, ll. 60-65. However, these connector portions 54 and 64 of Fasig merely close upon or engage one another. In no way does the male portion 54 of the Fasig device provide leverage, let alone leverage to disengage the cartridge 60 from the docking bay 40. Indeed, the *immobile* nature of the male connector

portion 54 of the Fasig device establishes that this portion cannot provide leverage to move one component with respect to another.

Thus, Applicants respectfully assert that Fasig does not disclose all of the features recited in independent claim 9. Accordingly, Applicants respectfully assert that Fasig does not anticipate independent claim 9 and its respective dependent claims 10-13. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of claims 9-13.

**Independent Claim 23 and the Claims Depending Therefrom**

Independent claim 23 recites,

A method of selectively securing a removable component to a computer device, comprising:

actuating a locking mechanism such that the locking mechanism actuates an engaging member through a pivotable member configured to selectively position the removable component between secured or unsecured configurations with respect to the computer device.

(Emphasis added.) Respectfully, Applicants assert that Fasig does not disclose all these recited features, particularly the ones highlighted above.

**For example, Fasig does not disclose an engaging member that extends through a pivotable member.** Indeed, in the Fasig device, at no point in time does the female connector portion 68, which the Examiner alleged is anticipatory of the claimed engaging member, extend through handle 70, which the Examiner alleged is anticipatory of the claimed pivotable member. In the Fasig device, the handle 70 is disposed on the outside of the cartridge 60, while the female connector portion 68 is disposed on the inside of the cartridge 60. *See* Fasig, col. 6, ll. 22-25; FIG. 5a. By turning or pivoting the handle 70 of the Fasig device, the female connector portion 68 engages or disengages male connector portion 54. *See id.* at col. 6, ll. 61-64. Specifically, the female connector portion 68 moves

vertically and in a direction wholly parallel to the handle 70. *See id.* at FIG. 5a. Accordingly, the female connector portion 68 of the Fasig device is incapable of extending through the handle 70 as the Examiner contends, because such interaction would require the female connector portion 68 of Fasig to travel to the exterior of the component 60 and in a direction transverse to the handle 70. This simply does not occur in the Fasig device.

Thus, Applicants respectfully assert that Fasig does not disclose all of the features recited in independent claim 23. Accordingly, Applicants respectfully assert that Fasig does not anticipate independent claim 23 and its respective dependent claims 24 and 25. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of claims 23-25.

**Claim Rejections under 35 U.S.C. § 103(a)**

In the Office Action, the Examiner rejected claims 1-8, 14-19, 21 and 22 under 35 U.S.C. § 103(a) as obvious in view of Fasig and the Sarkissian reference (U.S. Patent No. 6,200,146; hereinafter "Sarkissian"). In rejecting independent claims 1 and 14, the Examiner stated that,

Referring to claims 1 and 14, Fasig discloses a system comprising a computer device, a removable component (60) engageable and disengageable with the computer device, and a locking assembly or mechanism for coupling and uncoupling a removable component (60) coupleable to and from a computer device (12), comprising a first member (54) selectively positionable between secured and unsecured configurations of the removable component with respect to the computer device and for at least partially disengaging the removable component with respect to the computer device, (see Fig. 5a), and a second or engaging (68) [*sic*]positionable between first and second configurations (i.e., clamped and unclamped, respectively). Fasig does not teach the first configuration wherein the second member extends through the first member in the secured configuration to secure the first member. Sarkissian teaches a locking mechanism (Fig.

4) for coupling and uncoupling a removable component (68) coupleable to and from a computer device (not shown), comprising a pivotable member (110), a first member (75) and a second member having portion (108), wherein the second member (108) extends through the first member (75) to secure the first member in a secured configuration. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the second member of Fasig, to include a portion that extends through the first member, as taught by Sarkissian to reduce or prevent unwanted sliding of the computer component in the secured configuration.

Office Action mailed September 17, 2004, pp. 4-5. Respectfully, Applicants traverse the Examiner's rejections, because the cited references, in contrast to the Examiner's assertions, do not disclose all of the features recited in independent claims 1 and 14.

#### **Legal Precedent**

Applicants respectfully remind the Examiner that the burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). To establish a *prima facie* case, the Examiner must not only show that the combination or modification includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the reference or references. *See Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985).

#### **Independent Claim 1 and the Claims Depending Therefrom**

Independent claim 1 recites,

A locking mechanism for coupling and uncoupling a removable component coupleable to and from a computer device, comprising:

a first member *selectively positionable* between secured and unsecured configurations of the removable component with respect to the computer device; and



a second member positionable between first and second configurations, wherein the first configuration extends the second member through the first member in the secured configuration to secure the first member.

(Emphasis added.) Respectfully, Applicants assert that the cited references, taken alone or in combination, do not disclose all of the recited features, particularly those highlighted above.

**For example, the cited references, taken alone or together, do not disclose a first member that is “selectively positionable between secured and unsecured configurations,” as is recited in claim 1.** Beginning with Fasig, the male connector portion 54 of the Fasig device, which the Examiner alleged as anticipatory of the claimed first portion, is immobile and cannot be positionable, let alone positionable between secured and unsecured configurations of the removable component with respect to the computer device. As discussed above, the male connector portion 54 of the Fasig device is immovably disposed within the docking bay 40. See Fasig, FIGS. 4 and 5a. Thus, in contrast to the Examiner’s contentions, the male connector 54 of Fasig cannot and does not anticipate the first member that is positionable recited in independent claim 1.

Furthermore, Sarikissan does not obviate the deficiencies of Fasig. Indeed, the Sarkissian reference also does not disclose a positionable first member, let alone a second member that extends through the first member, as recited in claim 1. First, the bore 75 (i.e., an aperture) of the Sarkissian device, which the Examiner contends is anticipatory of the claimed first member, cannot reasonably be interpreted as a member. Indeed, one of ordinary skill in the art would not consider a bore that is an absence of material or a void a member as recited in the instant claim. Secondly, even if, *arguendo*, the Examiner’s interpretation is deemed reasonable, Applicants respectfully assert that this bore 75 of Sarkissian is not positionable. Figure 4 of

Sarkissian, which is the only portion of Sarkissian that is cited by the Examiner in support of the rejection, illustrates a conventional zero insertion force connector device 60 that would be stationarily mounted on a printed circuit board. *See* Sarkissian, col. 3, ll. 63-66; col. 2, ll. 50-55. More specifically, Sarkissian discloses a plug connector 66 that includes pins 84 that engage with appropriate receptacles for mounting thereto. *See id.* at col. 4, ll. 7-14. This plug connector 66, which is fixed in position when mounted for use, includes a bore 75 through which a shaft 104 of a separate connector 64 is received. *See id.* at col. 4, ll. 1-4; col. 4, ll. 50-57. However, this bore 75 of Sarkissian is not positionable, as it is fixed in location when mounted to an appropriate receptacle of a printed circuit board. Indeed, neither the bore 75 nor the plug connector 66 is positionable, and the lever 110 that is connected to the separate connector 64 of the Sarkissian device is the only positionable element. *See id.* at FIG. 3.

Thus, Applicants respectfully assert that Fasig and Sarkissian, taken alone or together, do not disclose all of the features recited in independent claim 1. Accordingly, Applicants respectfully assert that the cited references do not render obvious independent claim 1 and its respective dependent claims 2-8. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of claims 1-8.

**Independent Claim 14 and the Claims Depending Therefrom**

Independent claim 14 recites,

A system, comprising:

a computer device;

a removable component engageable and  
disengageable with the computer device; and

a locking assembly, comprising:

a first member for at least partially  
disengaging the removable component with respect to the  
computer device; and

an engaging member positionable between  
first and second configurations, wherein the engaging  
member in the first configuration extends through the first  
member to secure the first member with respect to the  
computing component.

(Emphasis added.) Respectfully, Applicants assert that the cited references, taken alone or in combination, do not disclose all of the recited features, particularly those highlighted above.

**For example, the cited references, taken alone or together, do not disclose a first member that is “for at least partially disengaging the removable component with respect to the computer device” as is recited in claim 14.** Beginning with Fasig, the male connector portion 54 of the Fasig device, which the Examiner alleged as anticipatory of the claimed first member, is immobile and bears no relation to the ability to engage or disengage two components with respect to one another. As discussed above, the male portion connector 54 of the Fasig device is nothing more than an electrical connector and cannot disengage other components from one another, let alone a removable component with respect to a computer device. Indeed, the male portion connector 54 of Fasig is by no means capable of disengaging the removable component 60 from the docking bay 40. Thus, in contrast to the Examiner’s contentions, the male connector 54 of Fasig cannot and does not anticipate the first member recited in independent claim 14.

Furthermore, Sarikissan does not obviate the deficiencies of Fasig. Indeed, the Sarkissian reference does not disclose a first member *for disengaging any one component with another*, let alone disengaging a removable component with respect to a computer device, as recited in claim 14. First, and as discussed above, one of ordinary skill in the art would not reasonably consider the bore 75 (i.e., an aperture or an absence of material) of

the Sarkissian device as a member. Secondly, even if, *arguendo*, the Examiner's interpretation is deemed reasonable, Applicants respectfully assert that this bore 75 bears no relation to the ability to disengage one component with another. Indeed, an absence of material cannot effectuate movement of another element, let alone effectuate disengagement of a removable component with respect to a computer device, as recited in independent claim 14. Moreover, as discussed above, the bore 75 of Sarkissian is immobile, and this nature only further demonstrates that the bore cannot move or effectuate movement of another element.

Thus, Applicants respectfully assert that Fasig and Sarkissian, taken alone or together, do not disclose all of the features recited in independent claim 14. Accordingly, Applicants respectfully assert that Fasig does not render obvious independent claim 14 and its respective dependent claims 15-22. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of claims 14-22.

#### **Dependent Claim 20**

In the Office Action, the Examiner rejected dependent claim 20 as obvious in view of Fasig, Sarkissian and the Tsang et al. reference (U.S. Patent No. 6,728,099; hereinafter "Tsang"). However, Applicants respectfully assert that dependent claim 20 is, at a minimum, patentable over the Fasig and Sarkissian references for its dependence on an allowable base claim, independent claim 14. Moreover, neither the Examiner nor Tsang itself suggests that Tsang is capable of obviating the deficiencies of Fasig and Sarkissian, as discussed above. Accordingly, Applicants respectfully assert that dependent claim 20 is patentable by virtue of its dependence on an allowable base claim (i.e., independent claim 14) and also by virtue of the additional features recited therein. Accordingly, Applicants respectfully request reconsideration and allowance of dependent claim 20.

**Conclusion**

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: December 17, 2004



---

Manish Vyas  
Reg. No. 54,516  
(281)970-4545

**CORRESPONDENCE ADDRESS**  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, Colorado 80527-2400